

PROCEEDINGS  
OF THE  
BIOLOGICAL SOCIETY OF WASHINGTON

A NEW RACE OF DUSKY GROUSE (*DENDRAGAPUS OBSCURUS*)  
FROM THE GREAT BASIN

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A systematic review of the subspecies of *Dendragapus obscurus* was presented by Swarth (Proc. Calif. Acad. Sci. (4), 20, 1931:1-7) when he described the race *D. o. pallidus*. His material, however, did not reveal the picture of variation in the Great Basin. He commented that conditions were not clear at the southern boundaries of *richardsonii* and *pallidus* and in the territory where either or both approach the range of *obscurus*. Subsequently, Linsdale (Pacific Coast Avifauna No. 23, 1936:47), in his study of the birds of Nevada, assigned the grouse from the desert mountain ranges of the central portion of the state (Toyabe, Toquima and Monitor mountains) to *pallidus* and those from the northeastern and central eastern sections (East Humboldt, Jarbidge, Shell Creek and Snake mountains) to *obscurus*.

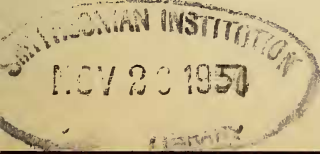
During our recent field work in the Deep Creek Mountains of central western Utah, adjacent to the Goshute Indian Reservation just north of the Snake Range of Nevada, several specimens were obtained which, on the basis of the literature, we expected to represent *obscurus*. Such did not prove to be the case, and a study of the Dusky Grouse of the entire Great Basin and surrounding areas has convinced us that a different race exists in eastern Nevada and western Utah which we now describe as

*Dendragapus obscurus oreinus*, new subspecies

Great Basin Dusky Grouse

*Type*.—Adult ♂, No. 10779, University of Utah, Museum of Zoology; 3 miles north of Queen of Sheba Mine, 7500 feet, west side Deep Creek Mountains, Juab County, Utah; April 23, 1950; Collected by Robert K. Selander, original number 556; testis 14 mm.

*Subspecific characters*.—Compared with *obscurus*, adult males of *oreinus* have the ground color of the feathers of the dorsum a lighter brown; they show more white on the edgings of the scapulars, primary and secondary coverts; the vermiculations of the scapulars, sides, flanks and wing coverts are paler and grayer. The latter distinctions are especially noticeable from a lateral view and the mass effect is a paler, grayer bird than *obscurus*. Females are even more distinct, those of *oreinus* being paler and possessing tan, buff, and gray colors rather than rich brown. This is most evident on the scapulars, wing coverts, and flanks. Nape and auriculars gray instead of light buff as in *obscurus*.



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Differs from *richardsonii* in the possession of a distinct tail band and rounded tail. Plumage of upper parts generally paler through having a brown rather than fuscous-black ground color, and the vermiculations of the flanks, sides, wing coverts, and scapulars are lighter and thus more conspicuous. Males more easily distinguishable from *richardsonii* than females.

Differs from *pallidus* in much the same way as from *richardsonii*, the principal distinguishing character being the possession of the tail band and rounded tail.

*Measurements.*—Adult male (12 specimens); wing, 224.0-249.0 (236.6); tail, 158.5-184.7 (175.2). Adult female (9 specimens); wing, 208.5-221.0 (216.2); tail, 133.0-144.5 (139.9).

*Geographic distribution.*—Known from the Deep Creek Mountains in central western Utah, Snake Range in central eastern Nevada, Ruby Mountains of northeastern Nevada and Toyabe Range in central Nevada.

*Specimens examined.*—*Utah*: Juab County: head of Pass Creek, 8000 feet, 6 miles east Indian Village, Deep Creek Mountains, 2 (June); 3 miles north of Queen of Sheba Mine, 7500 feet, west side Deep Creek Mountains, 2 (April); Queen of Sheba Mine, 9000 feet, west side Deep Creek Mountains, 1 (May). *Nevada*: White Pine County: Baker Creek, 11,000 ft., Snake Range, 2 (Aug.); Pole Canyon, 8200 feet, Snake Mountains, 1 (June); head of Deadman Creek, 9300 feet, Mt. Moriah, 1 (June). Elko County: west side Ruby Lake, 6 miles north Elko County line, 11 (Nov., Dec.); Harrison Pass R. S., Green Mountain Canyon, Ruby Mountains, 4 (June); Three Lakes, Ruby Mountains, 2 (July); Long Creek, South Fork, Ruby Mountains, 2 (July). Nye County: Toquima Range, 1½ miles southeast Jefferson, 8600 feet, 2 (July). Lander County: Kingston Creek, 9600 feet, 1 (Sept.); South Fork of Big Creek, west side Toyabe Range, 2 (Oct.); Birch Creek, 8000 ft., 1 (June).

*Remarks.*—This Great Basin race apparently is more closely related to the *obscurus* stock of the Rocky Mountains to the east than to the *pallidus-richardsonii* population to the north. The latter population differs from *obscurus* in a number of distinctive ways. In ground color, *obscurus* is brown, less blackish while the northern population features a dark fuscous-black. In tail characters, *pallidus* and *richardsonii* have a truncate shape and no distinct terminal tail band, while *obscurus* has a well marked tail band and rounded shape. The race *oreinus* shares the rounded tail and terminal tail bar with *obscurus*, and though of a paler coloration, it possesses the warm brown ground color of that race. At the same time *oreinus* shows a different arrangement of characters by combining the tail shape and band of *obscurus* with the grayness of the feather edgings of *pallidus* and *richardsonii*.

Heretofore it has been thought that the extreme in pallor was reached in the race *pallidus* of south central British Columbia, eastern Washington and northeastern Oregon. Now it appears that the Great Basin population is even paler. Within the race *oreinus* the palest specimens examined by us are those from the type locality in the Deep Creek Mountains. Significantly, the paleness is manifest in juveniles as well as adults.

In the majority of males of this new race the tail band is pure gray and fully as deep as in *obscurus*. In some specimens of *pallidus* and

*richardsonii* a transverse line gives a suggestion of a band but the coloration of the tail anterior and posterior to this line is the same. In specimens from the Toyabe Mountains to the west in central Nevada the band is less deep and less distinctive, possessing a mottling which is a puzzling feature. This character probably influenced Linsdale to refer these specimens to *pallidus*. There may, indeed, be intergradation over an extended area between *oreinus* and *pallidus* beginning in this area. These Toyabe specimens now seem best placed with *oreinus*, however.

Possible intergradation between *oreinus* and either *pallidus* or *richardsonii* is indicated by a female from Bear Creek, 8000 feet, Jarbidge Mountains, Elko County, Nevada which locality is near the Idaho border. It shows a darker coloration than *oreinus* and a rather poorly developed tail band. Another female from one mile east of Strawberry Creek Ranger Station, Wasatch Mountains, Franklin County, Idaho is seemingly intermediate between *richardsonii* and *obscurus*, closest perhaps to the former, because of its dark coloration and small, poorly defined tail band. Specimens of *obscurus* from the Wasatch Mountains of Utah are generally somewhat paler than examples of that race from Colorado and New Mexico. A break occurs between *oreinus* and *obscurus* west of the Wasatch Mountains, correlated with the desert hiatus. The Great Basin race, however, occupies isolated mountain ranges.

It is not certain whether there are significant differences between the several races in measureable characters. The figures given in Ridgway and Friedmann (Bull. U. S. Nat. Mus., 50, Pt. 10, 1946:82-89) suggest that the males of *pallidus* and *obscurus* are of similar size, with those of *richardsonii* being smaller. The females of *richardsonii* and *pallidus* are about the same size with those of *obscurus* being slightly larger. Our data based on adult birds indicate that the wing and tail lengths of *oreinus* are slightly longer than in *obscurus*. Before size differences can be attributed with certainty to these races there needs to be further evaluation of these characters based on much new material and furthermore the age differences noted by Swarth (Univ. Calif. Publ. Zool., 30 (4), 1926:78-84), must be taken into account.

We are indebted to Kenneth C. Parkes of Cornell University for the loan of several specimens from the Wasatch Mountains collected by J. Dan Webster and to the following persons for access to museum collections under their care: C. Lynn Hayward, Brigham Young University; Robert T. Orr, California Academy of Sciences; Alden H. Miller and Frank A. Pitelka, Museum of Vertebrate Zoology.

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